

THE GENERIC NAME OF THE NORTH AMERICAN MUSK TURTLES

Hobart M. Smith¹ and Kenneth R. Larsen¹

ABSTRACT.— Although several recent workers have used the name *Sternotherus* for the North American musk turtles, the rules of priority render *Sternotherus* the correct name for them. The generic type fixation by Stejneger of *S. odoratus* is accepted.

A number of recent regional as well as more general works (e.g., Cochran and Goin, 1970:137-139) use the generic name *Sternotherus* for the North American musk turtles commonly bearing the name *Sternotherus*. Use of the former generic name in recent years stems from the excellent revision by Tinkle (1958) of the *S. carinatus* complex, wherein (p. 51) the generic name *Sternotherus* is held to be a misspelling that should be replaced by *Sternotherus*. As pointed out by Albrecht (1967:82), the latter spelling actually does not supersede *Sternotherus*.

It is true that Bell is credited ("*Sternotherus*, Bell, Mss.") by Gray (1825:211) as the source of *Sternotherus* in the first appearance of either name and that accordingly perhaps Bell should now be regarded as the author of the name. The wording of the description is, however, completely different from that of Bell's subsequently published *Sternotherus* (Bell, 1826:305), and Gray employs the first person form in commenting on the genus: "Cuvier describes the anterior and posterior lobes of the sternum of these species to be moveable; but the hinder was fixed on the specimens which I have examined, which were all dry." Thus the description appears to be in Gray's words, even though he clearly may have drawn the idea for the genus from Bell's MS.

The International Code of Zoological Nomenclature (1964), Article 50, specifies, in this context, that "The author . . . of a scientific name is . . . the person . . . who first publishes it . . . in a way that satisfies the criteria of availability . . . , unless it is clear from the contents of the publication that . . . some other person . . . is alone responsible both for the name and the conditions that make it available." Clearly Gray's account is not a copy of Bell's, and accordingly it can only be concluded that Bell did not provide the description in the form in which it appeared in Gray's work, even though he may have provided the name or a basis for the name. Reluctantly, but seemingly incontrovertibly, the conclusion is that, by present rules, Gray must be regarded as the author of *Sternotherus*. Bell remains author of his name *Sternotherus*, based upon a different array of taxa, including one African, one Asian, and two North American nominal species.

¹Department of Environmental, Population, and Organismic Biology, University of Colorado, Boulder 80302.

The name appearing in 1825 cannot be rendered as *Sternothaerus* even if attributed to Bell. Although it is true that incorrect original spellings are to be replaced by correct spellings, as pointed out by Tinkle (1958:51), the code severely limits the concept of "incorrect original spellings." In this case, only an inadvertent error could be called incorrect, whereas there is no evidence whatever that Gray did not use the spelling *Sternotherus* quite deliberately. Article 32 of the code makes it clear that even if Gray did err in transliteration, such an error is not itself "inadvertent." Again there is no escape from the conclusion that *Sternotherus* is the correct spelling for the 1825 name. Indeed, Gray repeated this spelling in his subsequent works, giving no indication of occurrence of error therein.

In turn, Article 56 expressly provides that "even if the difference between two genus-group names is due to only one letter, these two names are not to be considered homonyms." Accordingly *Sternothaerus* of 1826 must be judged on its own merits, as it were, as a name completely independent of and different from *Sternotherus* of 1825.

Although Gray (1825) included a species of *Kinosternon* in his *Sternotherus* ("*S. pensylvanica*" = *K. subrubrum*), as well as a species we now recognize in *Sternotherus* ("*S. odorata*"), the name *Sternotherus* has long been accepted as fixed with its type as *S. odoratus*, although the earliest selection of this species as type is questionable. It was not selected either directly or indirectly by Bell, as Stejneger (1902:236) maintained. Gray's name could never be applied properly to an African group, since among the originally included species (to which type selection is limited) there were no African representatives. Stejneger's (1902:237) restriction of type is explicit and acceptable. The alternative would merely make *Sternotherus* a synonym of *Kinosternon* Spix, 1824 by fixation with *K. subrubrum*.

The type of *Sternothaerus* Bell could have been restricted subsequently to any of the four species included by Bell: *trifasciatus* sp. n. (= *Cuora trifasciata*), *leachianus* sp. n. (= *Pelusios subniger* Lacépède, 1789), *odoratus* (= *S. odoratus* Latreille, 1801), and *boscii* (Merrem, 1820) (= *S. odoratus*). Stejneger (1902:237) explicitly designated *S. odoratus* as the type, although by specious reasoning (in modern contexts), since he regarded Bell's *Sternothaerus* as merely a deviant spelling of Gray's *Sternotherus* and since he regarded Bell's inclusion in *Sternothaerus* of but one (*S. odoratus*) of the species Gray included in *Sternotherus* as fixing the type of both genera as *S. odoratus*. This is not admissible under the present code, but at this date no reassignment would be useful. Other workers have long accepted Stejneger's explicit type restrictions, and we recommend that this policy be perpetuated.

LITERATURE CITED

- ALBRECHT, P. W. 1967. The cranial arteries and cranial arterial foramina of the turtle genera *Chrysemys*, *Sternotherus*, and *Trionyx*: A comparative study

- with analysis of possible evolutionary implications. *Tulane Studies Zool.* 14(3):81-99, figs. 1-3.
- BELL, T. 1826. A monograph of the tortoises having a moveable sternum, with remarks on their arrangement and affinities. *Zool. J.* 2:299-310. (The date in 1825 cited by Stejneger is the date of presentation, not of publication.)
- COCHRAN, D. M., AND C. J. GOIN. 1970. The new field book of reptiles and amphibians. G. P. Putnam's Sons, New York.
- GRAY, J. E. 1825. A synopsis of the genera of reptiles and Amphibia, with a description of some new species. *Ann. Philos.* 10(2):193-217.
- STEJNEGER, L. 1902. Some generic names of turtles. *Proc. Biol. Soc. Washington* 15:235-238.
- TINKLE, D. W. 1958. The systematics and ecology of the *Sternothaerus carinatus* complex. *Tulane Studies Zool.* 6(1):1-56, figs. 1-57.